

Serial No.: 10/682,434  
Docket No.: 03-33 PHUS  
EBI.013

**REMARKS**

Claims 7, 10 and 12-21 are all the claims presently pending in the application. Claims 7 and 10 have been amended to more particularly define the invention. Claim 12-21 have been added. Claims 1-6, 8-9 and 11 have been canceled without prejudice or disclaimer in the interest of expediting prosecution.

It is noted that the claim amendments herein or later are not made to distinguish the invention over the prior art or narrow the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein or later should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Applicant gratefully acknowledges the Examiner's indication that claim 7 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant has accordingly rewritten claim 7 in independent form. Applicant submits that new independent claim 19 contains similar language as allowable claim 7 and is, thus, likewise allowable. However, Applicant respectfully submits that all of the claims presently pending are allowable.

With respect to the prior art rejections, claims 1-11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Akiba (U.S. Publication No. 2002/0171361) in view of Itokawa et al. (U.S. Patent No. 6,577,062) (hereinafter "Itokawa").

These rejections are respectfully traversed in the following discussion.

Serial No.: 10/682,434  
Docket No.: 03-33 PHUS  
EBI.013

## I. THE CLAIMED INVENTION

An exemplary aspect of the invention, as recited in claim 10, is directed to a plasma display panel including a partition wall, made of metal, provided between two substrates and having an external surface covered by an insulation layer, a transverse wall extending in a row direction for defining a partition between unit light-emission areas adjacent to each other in a column direction, and a groove portion, which does not pass through the transverse wall from a front-facing face to a back face, formed in at least one of the front-facing face and the back face of the transverse wall.

Another aspect of the invention, as recited in claim 19, is directed to a plasma display panel including a partition wall, made of metal, provided between two substrates and having an external surface covered by an insulation layer, a transverse wall extending in a row direction for defining a partition between unit light-emission areas adjacent to each other in a column direction, and a groove portion formed in at least one of a front-facing face and a back face of the transverse wall. A dielectric is fitted into the groove portion, and another groove portion is formed in the other one of the front-facing face and the back face of the transverse wall in which the groove portion with the dielectric fitted therein is not formed.

The conventional method for forming the partition wall in a conventional plasma display panel (PDP) by use of sandblasting involves a complicated manufacturing process and therefore gives rise to the problem of a low level of productivity and increased manufacturing costs. (See Application at page 3, lines 16-19) Using a metal-made partition wall covered by an insulation layer has been considered. (See Application at page 3, lines 20-22) However, using a metallic partition wall in the PDP gives rise to the problem of an increase in the

Serial No.: 10/682,434  
Docket No.: 03-33 PHUS  
EBI.013

the electrostatic capacity in the panel and an increase in reactive power associated therewith, leading to an increase in electrical power consumption. Hence, the use of metallic partition wall is not commercially practical at present. (See Application at page 3, lines 23-27 and page 4, line 1)

On the other hand, when a partition wall made of metal for a PDP, according to the claimed invention, is used for partitioning a discharge space defined between a front glass substrate and a back substrate of a PDP, the electrostatic capacity which is produced in a non-display area of a PDP when a metal-made partition wall is used is reduced. Hence, the occurrence of reactive power during driving of the PDP is suppressed. (See Application at page 4, lines 16-23; page 5, lines 15-22; page 6, lines 14-20; and page 7, lines 9-16)

## II. THE AKIBA AND ITOKAWA REFERENCES

The Examiner alleges that Akiba would have been combined with Itokawa to form the inventions defined in claims 1-6 and 8-11. However, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Akiba discloses a plasma display panel discloses a plurality of partition walls disposed between the front plate and the back plate of the display panel. (See Akiba at Abstract)

Itokawa et al. discloses a plasma display panel wherein non-discharge spaces are provided in barrier ribs formed on a rear substrate and black material layers functioning as black stripes are formed in cavities corresponding to non-discharge spaces. (See Itokawa at Abstract)

Serial No.: 10/682,434  
Docket No.: 03-33 PHUS  
EBI.013

Applicant respectfully submits that these references would not have been combined as alleged by the Examiner. Indeed, these references are completely unrelated, and no person of ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

In fact, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner. Indeed, contrary to the Examiner's allegations, neither of these references teaches or suggests their combination.

Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner and, therefore, the Examiner has failed to make a prima facie case of obviousness.

The Examiner concedes that Akiba does not teach or suggest "*a groove portion ... formed in at least one of the front-facing face and the back face of the transverse wall*," as recited in independent claim 10. Independent claim 19 contains similar language. Rather, the Examiner attempts to rely on Itokawa to make up for the deficiencies of Akiba.

However, Itokawa does not teach or suggest such a feature. Instead, Itokawa discloses that the "stripe barrier ribs 10 have a split pattern [having] non-discharge cavities 10c formed in channels between adjacent split portions 10a and 10b of the barrier ribs 10." (See Itokawa at Figure 2 and column 3, lines 23-26)

Alternatively, Itokawa discloses that "each of the barrier ribs 13 consists of barrier rib strips 13' and 13" which are split up in a ladder pattern [and] non-discharge cavities 14 are provided the adjacent barrier rib strips." (See Itokawa at Figures 3 and 5, and column 4, lines 43-47) (See also Itokawa at Figure 6 and column 5, lines 60-65)

Serial No.: 10/682,434  
Docket No.: 03-33 PHUS  
EBI.013

Thus, the non-discharge cavities 14 of Itokawa pass completely through the barrier rib 10 from the front to the back. Clearly, Itokawa does not teach or suggest a groove in at least one of an upper or lower surface of the partition wall.

Rather, Itokawa discloses a slot that divides the barrier ribs 10,13,23 of Itokawa into two separate parts. In fact, Itokawa makes no reference or suggestion to a groove portion formed in the partition wall to reduce the electrostatic capacity which is produced in the non-display area of a PDP when metal partition walls are used.

Itokawa certainly does not teach or suggest "a groove portion, which does not pass through the transverse wall from a front-facing face to a back face, formed in at least one of the front-facing face and the back face of the transverse wall," as recited in independent claim 10, or the desirability or benefit of providing such a feature. Therefore, Itokawa clearly does not make up for the deficiencies of Akiba.

Further, Applicant respectfully submits that since the barrier ribs of Itokawa are made of insulation material and not of metal, Itokawa does not indicate or suggest the problems created by the use of a metal partition wall. Further, the non-discharge cavities 10c,14,17,26 of Itokawa are not for solving the problem which a metal partition wall possess, namely the increase in electrostatic capacity in the panel and the increase in reactive power associated therewith. Rather, the discharge spaces have a black material layer 12,18,27 deposited therein so that the overall reflection of external light in the panel is reduced in order to improve contrast. (See Itokawa at column 4, lines 17-21)

Additionally, since the plasma display panel of Akiba is one wherein a display electrode (Y electrode) 17 and an address electrode (A electrode) 15 are disposed on the same

Serial No.: 10/682,434  
Docket No.: 03-33 PHUS  
EBI.013

glass substrate 13, the problem of the increase in electrostatic capacity in the panel when using a metal partition wall, noted above, does not occur.

Therefore, Applicant submits that there is no motivation or suggestion in the references to urge the combination alleged by the Examiner. Indeed, contrary to the Examiner's allegations, neither of these references teaches or suggests their combination.

In light of the above, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention. Therefore, the Examiner is respectfully requested to withdraw this rejection.

### **III. FORMAL MATTERS AND CONCLUSION**

Applicant notes that new independent claim 19 includes original claim 6 and allowable claim 7 with previously amended claim 10. As such, claim 19 includes a construction of allowable claim 7. Therefore, Applicant respectfully submits that claim 19 is likewise allowable.

In view of the foregoing, Applicant submits that claims 7, 10 and 12-21, all the claims presently pending in the application, are patentably distinct over the prior art of record and are allowable, and that the application is in condition for allowance. Such action would be appreciated.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned attorney at the local telephone number

Serial No.: 10/682,434  
Docket No.: 03-33 PHUS  
EBI.013

listed below to discuss any other changes deemed necessary for allowance in a telephonic or personal interview.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR §1.136. The Commissioner is authorized to charge any deficiency in fees, including extension of time fees, or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: 4/24/06



J. Bradley Wright, Esq.  
Registration No. 47,188

Sean M. McGinn, Esq.  
Registration No. 34,386

**McGINN INTELLECTUAL PROPERTY  
LAW GROUP, PLLC**  
8321 Old Courthouse Road, Suite 200  
Vienna, VA 22182-3817  
(703) 761-4100  
**Customer No. 21254**